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PCT

10/520453

Rec'd PCT/PTO 05 JAN 2005  
REC'D 25 AUG 2004  
WIPO PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY  
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P 20126 PC 00	FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. PCT/NO2003/000217	International filing date (day/month/year) 26.06.2003	Priority date (day/month/year) 09.07.2002
International Patent Classification (IPC) or national classification and IPC F17C13/08 // B63B25/14		
Applicant KNUTSEN OAS SHIPPING AS et al		

- This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 3 sheets, including this cover sheet.
- This report is also accompanied by ANNEXES, comprising:
  - ☒ (sent to the applicant and to the International Bureau) a total of 2 sheets, as follows:
    - ☒ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
    - ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
  - ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) \_\_\_\_\_, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

- This report contains indications relating to the following items:
 

<input checked="" type="checkbox"/>	Box No. I	Basis of the report
<input type="checkbox"/>	Box No. II	Priority
<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input type="checkbox"/>	Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<input type="checkbox"/>	Box No. VI	Certain documents cited
<input type="checkbox"/>	Box No. VII	Certain defects in the international application
<input type="checkbox"/>	Box No. VIII	Certain observations on the international application

Date of submission of the demand 29.12.2003	Date of completion of this report 12.08.2004
Name and mailing address of the IPEA/SE Patent- och registreringsverket Box 5055 S-102 42 STOCKHOLM Facsimile No. +46 8 667 72 88	Authorized officer  Anna Salomonsson / JA A Telephone No. +46 8 782 25 00

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## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/NO2003/000217

## Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

- ☐ This report is based on a translation from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
- ☐ publication of the international application (under Rule 12.4)
- ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

- ☐ the international application as originally filed/furnished
- ☒ the description:
- pages 1 - 8 \_\_\_\_\_ as originally filed/furnished
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☒ the claims:
- pages \_\_\_\_\_ as originally filed/furnished
- pages\* \_\_\_\_\_ as amended (together with any statement) under Article 19
- pages\* 1 - 2 \_\_\_\_\_ received by this Authority on 21.07.2004
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☒ the drawings:
- pages 1 - 5 \_\_\_\_\_ as originally filed/furnished
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to the sequence listing (*specify*): \_\_\_\_\_

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to the sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/NO2003/000217

**Box No. V** Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

## 1. Statement

Novelty (N)	Claims	<u>1-6</u>	YES
	Claims		NO
Inventive step (IS)	Claims	<u>1-6</u>	YES
	Claims		NO
Industrial applicability (IA)	Claims	<u>1-6</u>	YES
	Claims		NO

## 2. Citations and explanations (Rule 70.7)

## Documents cited in the International Search Report:

D1: FR, A1, 2536373  
D2: US, A, 4564109  
D3: US, A, 496734  
D4: US, A1, 2002084660

The cited documents represent the general state of the art.

The invention defined in amended claims 1-6 is not disclosed by any of these documents. The cited prior art does not give any indication that would lead a person skilled in the art to the claimed device for fixing vertically installed cargo pressure tanks. Therefore, the claimed invention is not obvious to a person skilled in the art.

Accordingly, the invention defined in amended claims 1-6 is novel and is considered to involve an inventive step. The invention is industrially applicable.

C l a i m s

1. A device for fixing vertically installed cargo pressure tanks (2), in particular of the type used for sea transport of pressurised petroleum products, where at least  
5 two cargo pressure tanks (2) placed in an upright position on a cassette lifting frame (4) constitute a liftable cassette (1), characterized in that the pressure tanks (2) are interconnected by means of an along the cargo pressure tanks (2) movable guide  
10 frame (6).
2. A device in accordance with claim 1, characterized in that the guide frame (6) is arranged to take up horizontal forces from the cargo pressure tanks (2) through abutment against a fixing section (18) in a  
15 cargo hold (14) of a ship (12).
3. A device in accordance with claim 2, characterized in that at least one contact surface (19, 20) of the guide frame (6) bearing against a corresponding contact surface (18) of the fixing section (18) is  
20 aslant relative to the longitudinal axis of the cassette (1).
4. A device in accordance claim 1, characterized in that the cassette lifting frame (4) is provided with lifting brackets (26) that are in mating engagement with  
25 hooks (28) of a lifting yoke (8), the hooks (28) being connected to an actuator (34), the actuator (34) being arranged so as to allow it to move the hooks (28) between a locking and a non-locking position.

5. A device in accordance with claim 4, c h a r a c t e r -  
r i z e d i n that the hooks 28 are formed so as to  
prevent them from being pulled out of their engagements  
with the lifting brackets (26) when the cassette lifting  
5 frame (1) is placed in the lifting yoke, even if the hy-  
draulic cylinder (34) mistakenly is operated during the  
lifting operation.

6. A method of lifting a cassette (1) into a cargo hold (14)  
of a ship (12), c h a r a c t e r i z e d i n that,  
10 during the lowering of the cassette (1) into the cargo  
hold (14), the guide frame (6) bears against the fixing  
section (18) before the cassette lifting frame (4) bears  
against the floor (16).